**Reserves and the Common Pool Resource Problem**

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Reserve pooling was used during the Panics of 1860 and 1873 to provide relief to banks facing runs on deposits. It was effective when combined with clearing house loan certificates and suspension of convertibility. Because reserves were scattered across banks before the advent of the Federal Reserve System, pooling allowed banks in cities to act like one large bank with a common pool of reserves. After 1873, in spite of a number of serious panics, pooling was never used again. Suspension of payments and clearing house loan certificates became the key tools to provide liquidity and stop panics. Wicker (2000) has argued that pooling was a highly effective tool in combatting panics; why it was never used in panics after 1873 remains a mystery to him. He does note that voluntary collective action was not in the interest of many banks after 1873. Timberlake (1993, p. 201) asserts that reserve pooling would become subject to the “economics of the commons,” with all banks feeling no hesitation to overgraze the common resource. While he provides no direct evidence for this prediction, that pooling was never even tried again suggests that such concerns were foremost in the minds of many bankers in New York City. He believes that clearing house loan certificates were more than adequate for mobilizing the reserves of banks during a panic and with a little modification could have served adequately as a private lender of last resort (1984).

Reserve pooling clearly has elements of the “commons,” and it is an example of a common pool resource as developed by Elinor Ostrom (1990). The pools of reserves in 1860 and 1873 were created by the potential users, the banks working through the New York Clearing House. Membership in the Clearing House was voluntary; although non-members would not have direct access to its services, most prominently check clearing. The success of the Clearing House in imposing a pooling arrangement also has elements of Buchanan’s theory of clubs (1965). As there was no formal lender of last resort in the United States at this time, any pool of reserves would have to be created privately. For the pool to work, the banks had to deal with several questions. The first was how would reserves be allocated during a crisis? Would they be priced or rationed? Another was how would moral hazard or adverse selection be limited? How would the lending arrangements be enforced and violators punished? Finally, how would new users or the appearance of outside intermediaries whose behavior could affect the effectiveness of pooling reserves be dealt with?

This paper looks at several issues that will help explain why the New York City banks never used a common pool of reserves to combat panics after 1873. They include the number of banks contributing to the pool, the variation in the size of the banks in the pool, and the concentration of reserves held by banks in New York. These factors are inspired by Buchanan’s theory of clubs. Between 1873 and the Panic of 1907 reserves became more concentrated at the ‘Big Six’ national banks, owing to an increase in correspondent bank deposits from the interior. It is likely that the big banks would be reluctant to pool these reserves, as they felt compelled to meet correspondent demands during the national banking era panics.

The nature of reserves—legal tender, specie, bank notes, etc.—may have also contributed to changes in the willingness of banks to cooperate in pooling reserves. The United States also did not returned to gold convertibility until 1879. Before 1879, legal tender notes (Greenbacks) were the reserves that could be paid to depositors. After 1879, specie and legal tender notes were reserves that could be paid to depositors. The reluctance to pool specie reserves may have increased after 1879, as specie was the only medium that could be used to settle international transactions. Pooling would put specie reserves at risk and threaten international payments under convertibility, unlike in 1873 when only legal tender notes were pooled.

***Evidence from 1860 and 1873***

Strong import demand combined with political uncertainty about the state of the Union in the fall of 1860 placed unusually strong demand on the stock of specie in the US. To prevent loan contraction as banks hoarded specie by not renewing loans or making new loans, the New York Clearing House member banks agreed to pool their specie reserves and treat it as a common fund (Dunbar 1904, p. 307). Banks facing and unusual demand for specie could call upon this fund by pledging securities to back the debt incurred. Dunbar points out that no bank could accumulate specie by holding back loans, as such specie would become part of the common fund, not part of a private hoard. Clearing House loan certificates (referred to as certificates of deposit by Dunbar) would be used in lieu of specie to settle clearing balances between banks.[[1]](#footnote-1) Under the rules of the Clearing House, this arrangement would become effective if three quarters of the member banks agreed. Only one bank, Chemical Bank, refused to go along with the pooling arrangement. It was willing to lose its clearing privileges because it had a small note circulation and stable deposit base combined with a large specie reserve that it was not willing to put at risk. In spite of Chemical Bank, the pooling arrangement resulted in a rapid increase in loans by New York Clearing House banks. Boston banks declined to follow New York’s pooling arrangement, resulting in a slow decline in loans. New York banks did not suspend specie payments to note holders or depositors, which set it apart from banks in other cities in this panic.

Pooling was last used during the Panic of 1873, a much more severe disruption according to Sprague (1910, p. 49). The panic blew up on September 18 with the failure of Jay Cooke and Co., a well-regarded merchant bank in New York that had overextended itself in railroad investments. The panic spread across New York and into numerous other cities. Even the New York Stock Exchange closed for ten days on September 30. In response to this crisis, the New York Clearing House authorized the issuance of clearing house loan certificates along with the equalization of reserves on Saturday, September 20, taking effect on Monday.[[2]](#footnote-2) Only legal tender notes, Greenbacks for the most part, were pooled in 1873, as specie did not circulate, although specie could count against reserve requirements and was used to settle international trade balances. Sprague argues that both measures were necessary to combat the nascent panic. Clearing House loan certificates allowed banks to settle clearing balances and maintain lending in the face of depositor withdrawals. Equalizing or pooling reserves also prevented banks from telling depositors who presented checks drawn on another bank for deposit to take those checks directly to the bank of origin for cash payment. This in effect forced banks to accept checks for deposit, run them through the formal clearing system, and likely accept loan certificates rather than cash in the process, avoiding a rush for currency because all banks would now be at risk for paying out cash, not just those short of cash reserves. Of course, suspension of payments eliminated the problem of paying out legal tender reserves (or specie reserves in subsequent panics), at least to individual depositors. Central reserve banks still shipped reserves to correspondent banks in the interior during 1873.

There is some evidence of cheating on the pool in 1873. The New York Clearing House threatened to expel members who did not participate in the reserve pool in 1873. Some banks also put legal tender deposits into special accounts, substituting national bank notes in the pool in their place. Under normal conditions national bank notes did not count as reserves. Banks that did not pay interest on correspondent deposits became reluctant to pool their reserves with the banks that did pay interest after 1873. This is a reflection of the antagonism that had been growing between the interest and no interest paying banks; interest-paying banks were increasingly viewed as reckless intermediaries trying to attract deposits to finance risky investments.

Reserve pooling was never used again after 1873. George S. Coe had been the director of the Clearing House Committee during the panics of 1860-61 and 1873. Wicker attributes his clear understanding of reserve pooling and willingness to act quickly as contributing greatly to the effectiveness of the Clearing House in damping the panic. The loss of Coe’s knowledge and his absence at the Clearing House after 1873 resulted in subsequent leadership not resorting to pooling.

The panics of 1884 and 1890 appeared to have been handled adequately with clearing house certificates alone, and until 1907, panics did not really threaten NYC. The panic of 1893 blew up in the interior, and the NYC banks felt little compulsion to aid the interior banks. The NYCH did issue loan certificates in the summer of 1893, but this was more of a precautionary move rather than one designed to directly combat a panic.

The number of clearing house member banks changed little between 1873 and 1907. Buchanan’s theory of clubs predicts that as membership in a club rises, enforcing the club’s regulations becomes increasingly difficult. While little increase in the number of members may not account for the disappearance of pooling, the concentration in reserves and other assets in the ‘big six’ banks in New York may partly explain the reluctance to pool reserves. In 1873 the Big Six banks had about 40 percent of bank assets in NYC, while in 1907 they had 57 percent.

Under the National Banking System, New York City national banks, as central reserve city banks, provided explicit reserve storage for interior national banks. Deposits by interior banks held at New York City national banks, known as bankers’ balances, were counted by the Office of the Comptroller of the Currency as official reserves for the interior national banks. As a result, the New York City financial markets faced a number of demands for its cash and liquid assets whenever the financial markets faced a widespread contraction.

By 1907, there was increased concentration of banker balances at the biggest six national banks in New York City. Sprague (1910, page 232) notes that in 1873, the biggest seven New York City national banks held about 30 percent of New York City banker balances; by 1907, the biggest six national banks held over 75 percent of banker balances held in New York City. The increased concentration of banker deposits in New York City national banks signaled the rising influence of the big six banks in the inter-regional payments system at that time.

In periods when Clearing House loan certificates were issued, Cannon (1910, page 79) describes how banks took out Clearing House loan certificates “as a patriotic movement” that all member banks should embrace “for the welfare of the community as a whole” as opposed to other motives. The notable contrast in 1907, noted by Cannon (1910), was that only 60 percent of New York Clearing House member banks took out Clearing House loans, compared to nearly complete participation in previous episodes. The concentration of regional deposits in the big six banks by 1907 likely contributed to the lack of full participation by smaller (national) banks in Clearing House loan certificates. Smaller banks relied on the larger banks that had more resources as well as more incentives to preserve the system. See Sprague (1910, pages 233-34) for further detail.

Participation was not as universal in earlier panics as Cannon makes it seem, however. In 1873, the National Bank of Commerce, the second largest bank in New York in terms of assets, issued no loan certificates. In 1907, Hanover Bank, the fifth largest bank in terms of assets, issued no loan certificates. They may have been serving as creditor banks to those that used loan certificates in settlement. The point is that it appears that private interests were motivating the Clearing House Banks as much as the collective interest (Moen and Tallman 2015).

While pooling of reserves in 1873 worked, it even though there was some cheating on the arrangement. Until the Panic of 1907, panics did not significantly threaten the New York banks; the nascent reluctance to pool reserves that appeared in 1873 was enough to prevent further pooling arrangements. Clearinghouse loan certificates proved adequate in providing liquidity in these panics. The Panic of 1907 caught the New York banks by surprise. But even during this last panic the national banks seemed reluctant to coordinate their efforts to issue loan certificates through the New York Clearing House, much less pool reserves. The common pool problem of bank reserves was not serious enough to be overcome by private efforts until 1907 revealed the extent to which such a pool would be needed if panics got any more severe. And such a pool likely was not going to be provided privately.

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1. Before the National Banking Era, the New York Clearing House cleared state bank note redemptions as well as checks. [↑](#footnote-ref-1)
2. Dunbar argued that had these measures been authorized on Thursday, serious consequences could have been averted, especially those stemming from the failure of Jay Cooke and Co. (Sprague 1910, p. 49). [↑](#footnote-ref-2)